



BRUHAT BANGALORE MAHANAGARA PALIKE

Project:1. Providing Cement Concrete Road and RCC Drains at Byaraveshwara Layout (near Pruthvi Theator) in Ward No.06(Thanisandra), Byatarayanapura Sub Division

Est Cost: =30.0Lakh									
Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	2nd Cross		2	77.00	0.50	0.40	30.80		
	3rd Cross		2	81.00	0.50	0.40	32.40		
	New Drain								
	1st Main Road		1	60.00	1.20	0.90	64.80		
	2nd Main Road		2	75.00	1.20	0.90	162.00		
	4th Cross		1	40.00	1.20	0.90	43.20		
	5th Cross		1	30.00	1.20	0.90	32.40		
	Culvert		1	6.00	1.70	1.50	15.30		
							380.90	202.92	77292.23
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	Byaraveshwara Layout	Sqm							
	2nd Cross		2	77.00	1.80		277.20		
	3rd Cross		2	81.00	1.80		291.60		
	Consider 40% for R&R						227.52		
	Consider 20% for Damaged and Missing Slabs						-45.50		
							182.02	80.56	14663.21
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Consider 20% for Damaged and Missing Slabs						45.50		
							45.50	665.68	30291.10
4	KSRRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Bed Concrete	Cum							
	1st Main Road		1	60.00	1.20	0.10	7.20		
	2nd Main Road		2	75.00	1.20	0.10	18.00		
	4th Cross		1	40.00	1.20	0.10	4.80		
	5th Cross		1	30.00	1.20	0.10	3.60		
	Culvert		1	6.00	1.70	0.15	1.53		
	Bad Reaches for Road Portion		4	2.30	2.70	0.15	3.73		
							38.86	5348.76	207831.42

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
5	Providing laying plain/ reinforced cement concrete M20 Grade for Box Drain walls of thickness 10cm to 20cm including centering shuttering for work etc. complete as per approved drawing and design MORTH specification No. 1500, 1700, 2200. (P.No.265, I.No.37.59.2 of PW, P&IWTD SR 2016-17)								
	Bottom Raft	Cum							
	1st Main Road		1.00	60.00	0.90	0.15	8.10		
	2nd Main Road		2.00	75.00	0.90	0.15	20.25		
	4th Cross		1.00	40.00	0.90	0.15	5.40		
	5th Cross		1.00	30.00	0.90	0.15	4.05		
	Walls								
	1st Main Road		2.00	60.00	0.15	0.60	10.80		
	2nd Main Road		4.00	75.00	0.15	0.60	27.00		
	4th Cross		2.00	40.00	0.15	0.60	7.20		
	5th Cross		2.00	30.00	0.15	0.60	5.40		
							88.20	11032.48	973064.74
6	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.No.15, I.No.4.28 of PW, P&IWTD SR 2016-17)								
	New Culvert	Sqm							
			2	6.00	--	0.250	3.00		
							3.00	244.86	734.58
7	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.15, I.No.4.31 of PW,P&IWTD SR 2016-17)								
	Side Walls	Sqm							
	New Culvert		4	6.00	--	1.00	24.00		
							24.00	310.58	7453.92
8	Providing and laying cement concrete using 20mm and downsize granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for RCC works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, with all lead and lifts etc., complete (exclusive of cpost of steel and fabrication charges) Ready Mixed Cement Concrete M 20 for Raft foundation, Column, Footing, main and secondary beams. (P.No.18, I.No.4.48 of PW, P&IWTD SR 2016-17)								
	New Drain	Cum							
	Bottom Slab								
	New Culvert		1	6.00	1.50	0.25	2.25		
	Side Walls								
	New Culvert		2	6.00	0.25	1.00	3.00		
							5.30	6231.74	33028.22
9	KSRB - 4.9.2: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebtrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.2 of PW, P&IWTD SR 2016-17)								
	Consider 50Kgs/cum for Drain	Tonne		88.20	0.050	--	4.41		
	Consider 80Kgs/cum for Culvert	Tonne		5.30	0.080	--	0.43		
							4.84	64243.42	310938.15
10	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	1st Main Road		1.00	60.00	0.90	--	54.00		

Sl. No.	Description of work	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	2nd Main Road	2.00	75.00	0.90	--	135.00		
	3rd Cross	2.00	81.00	0.90	--	145.80		
	4th Cross	1.00	40.00	0.90	--	36.00		
	5th Cross	1.00	30.00	0.90	--	27.00		
	2nd Cross	2.00	77.00	0.90	--	138.60		
						536.40	1738.00	932263.20
11	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)							
	New Culvert	1.00	6.00	1.50	--	9.00		
	damaged slab	1.00	5.00	1.50	--	7.50		
						16.50	4951.00	81691.50
12	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) ((P.No.177, I.No.22.6.1 of PW,P&I WTD SR 2016-17)							
	CC Road	Cum						
	2nd Main Road	1.00	75.00	5.00	0.10	37.50		
						37.50	6217.96	233173.50
13	Vaccum de-watering with vacuum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&I WTD SR 2016-17)							
	CC Road	Sqm						
	2nd Main Road	1.00	75.00	5.00	--	375.00		
						375.00	95.40	35775.00
						Total Construction Cost		2938200.773
14						Cost towards Preparation of DPR LS		29383.00
15						Cost towards PMC / Third Party inspection LS		29383.00
						Sub Total		2996966.77
16						Miscellaneous and rounding off		3033.23
						Total		3000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Byatarayanapura Division
Yalahanka Zone, B.B.M.P.
Bangalore-560092



BRUHAT BANGALORE MAHANAGARA PALIKE

Project:2. Improvement to Drains and Asphaltting to Roads at Manjunatha Layout 1st, 2nd,3rd and 4th Cross in Ward No.06(Thanisandra), Byatarayanapura Sub Division

Est Cost: =50.0Lakh

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWD SR 2016-17)								
	Desilt	Cum							
	1st Main 3rd Cross		1	265.00	0.60	0.60	95.40		
	Cross Road in 1st Main 3rd Cross		2	100.00	0.70	0.60	84.00		
	Ravi Kiran Fashions Side Road		1	100.00	0.70	0.60	42.00		
	New Drain								
	1st Main 3rd Cross		1	200.00	0.95	0.85	161.50		
	Ravi Kiran Fashions Side Road		1	55.00	0.95	0.85	44.41		
							427.31	202.92	86710.25
2	Removing and resetting of footpath slab (P.No.265, I.No.37.56 of PW, P&IWD SR 2016-17)								
	1st Main 3rd Cross		1	265.00	0.75	--	198.75		
	Cross Road in 1st Main 3rd Cross		2.00	100.00	0.75	--	150.00		
	Ravi Kiran Fashions Side Road		1.00	100.00	0.75	--	75.00		
	Damaged slabs/missing 30%						-127.13		
							296.63	132.5	39302.81
3	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWD S.R 2016-17)								
	Bed Concrete	Cum							
	1st Main 3rd Cross		1	200.00	0.95	0.10	19.00		
	Ravi Kiran Fashions Side Road		1	55.00	0.95	0.10	5.23		
	CC roads								
	1st Main 3rd Cross		1	265.00	4.60	0.15	182.85		
	Cross Road in 1st Main 3rd Cross		1	100.00	4.20	0.15	63.00		
	Cross Road in 1st Main		1	30.00	3.00	0.15	13.50		
							283.58	5348.76	1516774.62
4	Providing laying plain/ reinforced cement concrete M20 Grade for Box Drain walls of thickness 10cm to 20cm including centering shuttering for work etc. complete as per approved drawing and design MORTH specification No. 1500, 1700, 2200. (P.No.265, I.No.37.59.2 of PW, P&IWD SR 2016-17)								
	Bottom Raft	Cum							
	1st Main 3rd Cross		1.00	200.00	0.75	0.15	22.50		
	Ravi Kiran Fashions Side Road		1.00	55.00	0.75	0.15	6.19		
	Walls								
	1st Main 3rd Cross		2.00	200.00	0.15	0.60	36.00		
	Ravi Kiran Fashions Side Road		2.00	55.00	0.15	0.60	9.90		
							74.59	11032.48	822885.10

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
5	KSRB - 4.9.2: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebtrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.3 of PW, P&IWTD SR 2016-17)								
	Consider 50Kgs/cum for Drain	Tonne		74.59	0.050	--	3.73		
							3.73	64243.42	239627.96
6	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Cover Slab	Sqm							
	1st Main 3rd Cross		1	200.00	0.75	--	150.00		
	Ravi Kiran Fashions Side Road		1	55.00	0.75	--	41.25		
	Damaged slabs/missing 30%						127.13		
							318.38	1738.00	553335.75
7	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	1st Main 3rd Cross		1	265.00	4.60	0.25	304.75		
	Cross Road in 1st Main 3rd Cross		1	100.00	4.20	0.25	105.00		
	Cross Road in 1st Main		1	30.00	3.00	0.25	22.50		
	Bad Reaches		6	2.00	2.00	0.23	5.52		
			7	2.00	1.50	0.23	4.83		
			10	1.50	1.50	0.23	5.18		
							447.78	164.76	73775.41
8	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanial mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
	Bad Reaches		6	2.00	2.00	0.23	5.52		
			7	2.00	1.50	0.23	4.83		
			10	1.50	1.50	0.23	5.18		
							15.53	1768.08	27449.44
9	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
	Bad Reaches		6	2.00	2.00	--	24.00		
			7	2.00	1.50	--	21.00		
			10	1.50	1.50	--	22.50		
							67.50	27.56	1860.30
10	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17)								
	Road Portion	Sqm							

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Ravi Kiran Fashions Side Road		1	155.00	5.30	--	821.50		
							821.50	3.18	2612.37
11	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWD SR of 2016-17)								
	Road Portion	Sqm							
	For Laying BC								
	Ravi Kiran Fashions Side Road		1.00	155.00	5.30	--	821.50		
							821.50	12.72	10449.48
12	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWD S.R 2016-17)								
	Road Portion	Cum							
	For Laying BC								
	Ravi Kiran Fashions Side Road		1	155.00	5.30	0.04	32.86		
							32.86	8118.54	266775.22
13	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWD SR 2016-17)								
	Edge line	Sqm	2	155.00	0.10	--	31.00		
							31.00	542.72	16824.32
14	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) ((P.No.177, I.No.22.6.1 of PW,P&IWD SR 2016-17)								
	Road Portion	Cum							
	CC roads								
	1st Main 3rd Cross		1.00	265.00	4.60	0.10	121.90		
	Cross Road in 1st Main 3rd Cross		1.00	100.00	4.20	0.10	42.00		
	Cross Road in 1st Main		1.00	30.00	3.00	0.10	9.00		
							172.90	6217.96	1075085.28

Sl. No.	Descri	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
15	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWTDR SR 2016-17)								
	CC roads	Sqm							
	1st Main 3rd Cross		1.00	265.00	4.60	--	1219.00		
	Cross Road in 1st Main 3rd Cross		1.00	100.00	4.20	--	420.00		
	Cross Road in 1st Main		1.00	30.00	3.00	--	90.00		
							1729.00	95.40	164946.60
							Total Construction Cost		4898414.910
16							Cost towards Preparation of DPR LS		48985.00
17							Cost towards PMC / Third Party inspection LS		48985.00
							Sub Total		4996384.91
18							Miscellaneous and rounding off		3615.09
							Total		5000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Byataru Division
Yalahanka Zone, B.B.M.P.
Bangalore-560052



BRUHAT BANGALORE MAHANAGARA PALIKE

Project:3. Improvement to Drains and Asphalting to Road at Defence Layout and Fathima Layout Main Road and Cross Roads in Ward No.06(Thanisandra), Byatarayanapura Sub Division

							Est Cost: =100.0Lakh		
Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5(P.No.4, I.No.2.3 of PW, P&IWD SR 2016-17)								
	For Water Supply								
	Defence Layout	Cum							
	1st Main Road		1	178.00	0.30	0.70	37.38		
	2nd Main Road		1	175.00	0.30	0.70	36.75		
	3rd Main Road		1	146.00	0.30	0.70	30.66		
							104.79	200.34	20993.63
2	Providing and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kgf/sq.cm working pressure chemp plast / Wavin or equivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials,with 160mm outer dia.(P.No.75,sl.No.11.56.4 of PW, P&IWD SR 2016-17)								
	Defence Layout	m							
	1st Main Road		1	178.00			178.00		
	2nd Main Road		1	175.00			175.00		
	3rd Main Road		1	146.00			146.00		
							499.00	1537.00	766963.00
3	KSRB 2.6 : Providing and filling sand in foundation upto plinth to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications.specification. No. KBS 2.10.2(P.No.6,sl.No.2.13 of PW, P&IWD SR 2016-17)								
	Defence Layout	Cum							
	1st Main Road		1	178.00	0.30	0.40	21.36		
	2nd Main Road		1	175.00	0.30	0.40	21.00		
	3rd Main Road		1	146.00	0.30	0.40	17.52		
	Deduct pipe		-1	499.00	0.02		-10.03		
							49.85	2263.10	112811.61
4	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications.(P.No.4, I.No.2.11 of PW, P&IWD SR 2016-17)								
	For Water Supply	Cum							
	Defence Layout								
	1st Main Road		1	178.00	0.30	0.30	16.02		
	2nd Main Road		1	175.00	0.30	0.30	15.75		
	3rd Main Road		1	146.00	0.30	0.30	13.14		
							44.91	80.56	3617.95

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
5	KSRB13-3.6 : Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.6.(P.No.90, I.No.13.15 of PW, P&IWTD SR 2016-17)								
	Defence Layout	m							
	1st Main Road		16	1.60			25.60		
	2nd Main Road		16	1.60			25.60		
	3rd Main Road		14	1.60			22.40		
							73.60	457.92	33702.91
6	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	New Drain	Cum							
	Defence Layout								
	1st Main Road		2	178.00	0.75	0.70	186.90		
	2nd Main Road		2	175.00	0.75	0.70	183.75		
	3rd Main Road		2	146.00	0.75	0.70	153.30		
	Culvert		7	7.00	1.60	1.30	101.92		
							625.87	202.92	127001.54
7	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain	Sqm							
	1st Main Road		2	178.00	1.80		640.80		
	2nd Main Road		2	175.00	1.80		630.00		
	3rd Main Road		2	146.00	1.80		525.60		
							1796.40	665.68	1195827.55
8	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	For Bed	Cum							
	Culvert		7	7.00	1.60	0.15	11.76		
							11.76	5348.76	62901.42
9	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.No.15, I.No.4.28 of PW, P&IWTD SR 2016-17)								
	New Culvert	Sqm							
			14	7.00	--	0.250	24.50		
							24.50	244.86	5999.07
10	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.15, I.No.4.31 of PW,P&IWTD SR 2016-17)								
	Side Walls	Sqm							
	New Culvert		28	7.00	--	0.90	176.40		
							176.40	310.58	54786.31

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
11	Providing and laying cement concrete using 20mm and downsize granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for RCC works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, with all lead and lifts etc., complete (exclusive of cpost of steel and fabricaton charges) Ready Mixed Cement Concrete M 20 for Raft foundation, Column, Footing, main and secondary beams. (P.No.18, I.No.4.48 of PW, P&IWTDR SR 2016-17)								
	New Drain	Cum							
	Bottom Slab								
	New Culvert		7	7.00	1.40	0.25	17.15		
	Side Walls								
	New Culvert		14	7.00	0.25	0.90	22.05		
							39.20	6231.74	244284.21
12	KSRB - 4.9.2: Providing TMT steel reinforcement Fe500 for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebtrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.2 of PW, P&IWTDR SR 2016-17)								
	Consider 80Kgs/cum for culvert	Tonne		39.20	0.080	--	3.14		
							3.14	64243.42	201724.34
13	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Culvert Slab	Sqm							
	New Culverts		7	7.00	1.50	--	73.50		
							73.50	4951.00	363898.50
14	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 (P.No.148, I.No.19.60 of PW,P&IWTDR SR 2016-17)								
	Defence Lauout								
	1st Main Road		1	178.00	9.50	0.30	507.30		
	2nd Main Road		1	175.00	6.50	0.30	341.25		
	3rd Main Road		1	146.00	6.00	0.30	262.80		
							1111.35	320.12	355765.36
15	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanial mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTDR SR 2016-17)								
	Defence Lauout	Cum							
	1st Main Road		1	178.00	8.40	0.23	343.90		
	2nd Main Road		1	175.00	5.60	0.23	225.40		
	3rd Main Road		1	146.00	5.20	0.23	174.62		
							743.91	1768.08	1315295.93
16	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgl/sqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTDR SR 2016-17)								
	Defence Lauout	Cum							
	1st Main Road		1	178.00	8.40	--	1495.20		

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	2nd Main Road		1	175.00	5.60	--	980.00		
	3rd Main Road		1	146.00	5.20	--	759.20		
							3234.40	27.56	89140.06
17	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTDR SR 2016-17)								
	For Bell Mouth Approaches		3	7.00	3.00	--	63.00		
							63.00	3.18	200.34
18	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTDR SR of 2016-17)								
	Defence Lauout	Sqm							
	For Laying BC								
	1st Main Road		1	178.00	8.40	--	1495.20		
	2nd Main Road		1	175.00	5.60	--	980.00		
	3rd Main Road		1	146.00	5.20	--	759.20		
	For Bell Mouth Approaches		3	7.00	3.00	--	63.00		
							3297.40	12.72	41942.93
19	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTDR S.R 2016-17)								
	Defence Lauout	Cum							
	For Laying BC								
	1st Main Road		1	178.00	8.40	0.04	59.81		
	2nd Main Road		1	175.00	5.60	0.04	39.20		
	3rd Main Road		1	146.00	5.20	0.04	30.37		
	For Bell Mouth Approaches		3	7.00	3.00	0.04	2.52		
							131.90	8118.54	1070802.95
20	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTDR SR 2016-17)								
	Edge line	Sqm	2	499.00	0.10	--	99.80		
	Center Line		0.5	178.00	0.10	--	8.90		
							108.70	542.72	58993.66
	Bore Well								

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
21	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Water in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging technical personal and labour required etc., as per Specification and direction (P.48, I. 9.4) PRED.SR 2012-13	Each BW							
			6				6	1882.00	11292.0
22	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13	Rmtr							
	0 to 50 m		6	50.00			300.00	306.00	91800.0
	50 to 100 m		6	50.00			300.00	400.00	120000.0
	100 to 150 m		6	50.00			300.00	445.00	133500.0
	150 to 200 m		6	50.00			300.00	470.00	141000.0
	200 to 250 m		6	50.00			300.00	544.00	163200.0
	250 to 300 m		6	50.00			300.00	583.00	174900.0
	300 to 350 m		6	50.00			300.00	622.00	186600.0
	Above 350m		6	50.00			300.00	658.00	197400.0
23	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by baseic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming tio IS 554/1985, one end fixied with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and durties) Prices include Collar-medium duty P. iii, I No. 84 PRED SR 2012-13	Rmtr							
			6	50.00			300.00	1325.00	397500.0
24	Providing 250mm dia PVC Pipe 6kg/cm SE PRED Approved Rate	Rmtr							
			6	18.00			108.00	754.47	81483.0
25	Providing and fixing 160mm Borewell Cap P. iii, I No. 85	Each							
			6				6	100.00	600.0

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
26	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for operation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required accessories such as suction, casing suction strainers sand guard Non return valve etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 25 stage. ATALANTA< SUGNA< CRI, KIRLOSKAR and other Equivalent Pumps PWD SR 2016-17 P. XXXXII Item No. 24 including of all taxes	No							
	17.5 HP 30 Stage		6				6	74300	445800.0
27	Supplying of ISI marked galvanized mild steel tube (continuously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threafes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendment 1-5 and with all its latest amendments if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008	Rmtr							
			6	250.00			1500.00	375.00	562500.0
28	Heavy Duty Collar 50 mm dia	Nos	264				264	130.00	34320.0
29	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A. P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-15	Mtr							
			12	255.00			3060.00	188.70	577422.0
30	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KUWS & DB for year 2008-09	No							
			6				6	3000.00	18000.0

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
31	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15	Each							
			6				6	302.00	1812.0
32	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15	Mtr							
			6	30.00			180.00	140.40	25272.0
33	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15	Mtr							
			6	30.00			180.00	10.80	1944.0
34	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete. (As per Civil SR KSRB I-2, P-7) P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15	Mtr							
	For Cutting Road Surface		6	25.00			150.00	85.00	12750.0
35	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15	Mtr							
	40mm dia GI pipe		6	4.00			24.00	345.00	8280.0
36	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., P. No. 62 / I.No. 7.13.2 KPWD Electrical SR 2014-15	No.							
	16Sqmm		6				6.00	280.00	1680.0
37	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia, (P No. 55, I No. 7.1) KPWD Electrical SR 2014-15	No							
			6				6	2727.00	16362.0

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
38	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15	No.							
	32 Amps		36				36	180.00	6480.0
39	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page No. 93 Item No. 13.55 / PWD SR 2016-17	Nos							
			6				6	1615.68	9694.0
	Basic Rate		1496.00						
	Area Weightage @ 8%		119.68						
	Total		1615.68						
40	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. P. No. 95 / I. No. 13.81.3 PWD SR 2016-7	No							
	50mm dia		6				6	232.20	1393.0
	Basic Rate		215.00						
	Area Weightage @ 8%		17.20						
	Total		232.20						
41	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc complete	No							
			6	4.00			24	80.00	1920.0
42	Supplying shunt capacitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications	No							
			6				6	350.00	2100.0
43	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32Amps TPN P No. 47 / I No.6.16.5 KPWD SR 2014-15	No							
			6				6	1547.00	9282.0
44	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete P.No. 49, I. No. 6.40.2 KPWD Electrical SR 2014-15	Sq.Cm							
	16SWG		12	120.00	60.00		86400		

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
			6	300.00	25.00		45000		
							131400	0.33	43362.0
45	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. 12.5HP to 15 HP Star Delta Starter SERDED Rate	No.							
			6				6	11000	66000.0
46	Earthwork excavation for pipeline trenches including deoporing or bank up to a lead of 50 mtrs including shiriry and statting danger lighting and using site rails and boring poles at every 100 mtrs wherever necessary as directed in th following structure manhole. Page No. 01/ Item No.1.2.2 / PRED SR 2012-13 Hard Soil	Cum							
			6	60.00	0.60	0.75	162.00		
							162.00	188.00	30456.0
	Basic Rate	188.00							
47	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and includng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., Page No.15 item No.3.4.2 b PRED SR 2012-13.	Rmtr							
	75 mm dia 6 KSC PVC pipe		6	60.00			360.00		
							360.00	157.00	56520.0
48	Refilling the basement and pipeline treanches with seclcted available earthe for trench excavation including authority condition in layers from thedi including disponsary of the sunplus earth with a heavy 200 mtrs Page No. 3 / Item No. 1.6 / PRED SR 2012-13	Cum							
							162.00	61.00	9882.0
	Basic Rate	61.00							

Sl. No.	Description	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
49	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 P. 92 / I.13.37 PWD SR - 2016-17	Each							
			12				12	2216.16	26594.0
	Basic Rate	2052.00							
	Area Weightage @ 8%	164.16							
	Total	2216.16							
	Total Construction Cost								9795753.272
50	Cost towards Preparation of DPR LS								97958.00
51	Cost towards PMC / Third Party inspection LS								97958.00
	Sub Total								9991669.27
52	Miscellaneous and rounding off								8330.73
	Total								10000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಜ್ಯೋತೀಶ್ವರಪುರ ಉಪ ವಿಭಾಗ
ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ/ಅಭಿಯಂತರರು
ಜ್ಯೋತೀಶ್ವರಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

Executive Engineer
Byatarayana Division
Yalahanka Zone, B.B.M.P.
Bangalore-560032

**BRUHAT BANGALORE MAHANAGARA PALIKE**

Project: 4.Improvement to Roads and Drains at Bharathnagara, Baloon Factory Road and Abu Bakker Masjid Road in Ward No.06(Thanisandra), Byatarayanapura Sub Division

								Est Cost: =100.0Lakh	
Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Nagakaliamma Temple rd		1	90.00	0.60	0.50	27.00		
	Durgamba Road		2	290.00	0.60	0.50	174.00		
	Indo Tech Rubber Facory Rd		2	160.00	0.60	0.50	96.00		
	Road 2		1	80.00	0.60	0.50	24.00		
	New Drain								
	Baloon Factory Cross Rd		2	75.00	0.75	0.60	67.50		
	New Culvert								
			4	6.50	2.00	1.00	52.00		
							440.50	202.92	89386.26
2	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Bed Concrete	Cum							
	New Culvert								
			4.00	6.50	2.00	0.15	7.80		
							7.80	5348.76	41720.33
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	Drain	Sqm							
	Nagakaliamma Temple rd		1.00	90.00	1.80		162.00		
	Durgamba Road		2.00	290.00	1.80		1044.00		
	Indo Tech Rubber Facory Rd		2.00	160.00	1.80		576.00		
	Road 2		1.00	80.00	1.80		144.00		
							1926.00		
	Consider 20% for Damaged and Missing Slabs						-385.20		
							1540.80	80.56	124126.85
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Baloon Factory Cross Rd		2	75.00	1.80		270.00		
	Consider 20% for Damaged and Missing Slabs						385.20		
							655.20	665	
5	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. Specification No. KBS 5.1.13.(using available stones) (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17)								
	New Culvert	Cum							
			2	4	6.50	0.6	1.05	32.76	

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
							32.76	4438.22	145396.09
6	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWD S.R 2016-17)								
	Dasarahalli Village	Cum							
		2	4	6.50		1.05	54.60		
							54.60	102.82	5613.97
7	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWD S.R 2016-17)								
	Coping	Cum							
		2	4	6.50	0.60	0.100	3.12		
							3.12	5767.46	17994.48
8	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Culvert Slab	Sqm							
	Culvert Slab		4	6.50	1.80	--	46.80		
							46.80	4951.00	231706.80
9	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tipplers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWD S.R 2016-17)								
	Road Portion	Cum							
	Nagakaliamma Temple rd		1.00	90.00	5.20	0.23	107.64		
	Road 2		1.00	80.00	5.00	0.23	92.00		
	Ballon Factory Rd		1.00	75.00	5.00	0.23	86.25		
	Bad Reaches		5.00	2.00	2.50	0.23	5.75		
			6.00	0.60	6.50	0.23	5.38		
			6.00	1.00	1.20	0.23	1.66		
							298.68	164.76	49210.19
10	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWD SR 2016-17)								
	Road Portion	Cum							
	Nagakaliamma Temple rd		1	90.00	5.20	0.23	107.64		
	Road 2		1	80.00	5.00	0.23	92.00		
	Ballon Factory Rd		1	75.00	5.00	0.23	86.25		
	Bad Reaches		5	2.00	2.50	0.23	5.75		
			6	0.60	6.50	0.23	5.38		
			6	1.00	1.20	0.23	1.66		
							298.68	1768.08	528086.60
11	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWD SR 2016-17)								

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Road Portion	Cum							
	Nagakaliamma Temple rd		1.00	90.00	5.20	--	468.00		
	Road 2		1.00	80.00	5.00	--	400.00		
	Ballon Factory Rd		1.00	75.00	5.00	--	375.00		
	Bad Reaches		5.00	2.00	2.50	--	25.00		
			6.00	0.60	6.50	--	23.40		
			6.00	1.00	1.20	--	7.20		
							1298.60	27.56	35789.42
12	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWD SR 2016-17)								
	Road Portion	Sqm							
	Durgamba Road		1	290.00	6.50	--	1885.00		
	Al-Khyyum Masjid		1	140.00	6.50	--	910.00		
	Road 1		1	160.00	5.20	--	832.00		
	Deduct Prime Coat for Bad Reaches						-55.60		
							3571.40	3.18	11357.05
13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWD SR of 2016-17)								
	For Laying BC	Sqm							
	Road Portion								
	Nagakaliamma Temple rd		1	90.00	5.20	--	468.00		
	Road 2		1	80.00	5.00	--	400.00		
	Durgamba Road		1	290.00	6.50	--	1885.00		
	Al-Khyyum Masjid		1	140.00	6.50	--	910.00		
	Road 1		1	160.00	5.20	--	832.00		
	Ballon Factory Rd		1	75.00	5.00	--	375.00		
							4870.00	12.72	61946.40
14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWD S.R 2016-17)								
	Road Portion	Cum							
	Nagakaliamma Temple rd		1	90.00	5.20	0.04	18.72		
	Road 2		1	80.00	5.00	0.04	16.00		
	Durgamba Road		1	290.00	6.50	0.04	75.40		
	Al-Khyyum Masjid		1	140.00	6.50	0.04	36.40		

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Road 1		1	160.00	5.20	0.04	33.28		
	Ballon Factory Rd		1	75.00	5.00	0.04	15.00		
							194.80	8118.54	1581491.59
15	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWD SR 2016-17)								
	Edge line	Sqm	2	835.00	0.10	--	167.00		
							167.00	542.72	90634.24
	Bore Well								
16	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging technical personal and labour required etc., as per Specification and direction (P.48, I. 9.4) PRED.SR 2012-13								
		Each BW	8				8	1882.00	15056.0
17	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.) P. 46 / I. 9.1 PRED SR 2012-13								
		Rmtr	8						
	0 to 50 m		8	50.00			400.00	306.00	122400.0
	50 to 100 m		8	50.00			400.00	400.00	160000.0
	100 to 150 m		8	50.00			400.00	445.00	178000.0
	150 to 200 m		8	50.00			400.00	470.00	188000.0
	200 to 250 m		8	50.00			400.00	544.00	217600.0
	250 to 300 m		8	50.00			400.00	583.00	233200.0
	300 to 350 m		8	50.00			400.00	622.00	248800.0
	Above 350m		8	50.00			400.00	658.00	263200.0

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
18	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming to IS 554/1985, one end fixed with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and duties) Prices include Collar-medium duty P. iii, I No. 84 PRED SR 2012-13	Rmtr							
			8	50.00			400.00	1325.00	530000.0
19	Providing 250mm dia PVC Pipe 6kg/cm SE PRED Approved Rate	Rmtr							
			8	18.00			144.00	754.47	108644.0
20	Providing and fixing 160mm Borewell Cap P. iii, I No. 85	Each							
			8				8	100.00	800.0
21	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for operation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required accessories such as suction, casing suction strainers sand guard Non return valve etc. complete. The pump and motor shall form an integral unit with all the required fittings 12.50 HP 25 stage. ATALANTA< SUGNA< CRI, KIRLOSKAR and other Equivalent Pumps PWD SR 2016-17 P. XXXII Item No. 24 including of all taxes	No							
	17.5 HP 30 Stage		8				8	74300	594400.0
22	Supplying of ISI marked galvanized mild steel tube (continuously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaded at one end and the other end protected as per specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendment 1-5 and with all its latest amendments if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008	Rmtr							
			8	250.00			2000.00	375.00	750000.0
23	Heavy Duty Collar 50 mm dia	Nos	352				352	130.00	45760.0

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
24	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-15	Mtr							
			16	255.00			4080.00	188.70	769896.0
25	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves gauges etc., involved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KUWS & DB for year 2008-09)	No							
			8				8	3000.00	24000.0
26	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15	Each							
			8				8	302.00	2416.0
27	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15	Mtr							
			8	30.00			240.00	140.40	33696.0
28	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15	Mtr							
			8	30.00			240.00	10.80	2592.0
29	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15	Mtr							
			8	25.00			200.00	85.00	17000.0
	For Cutting Road Surface		8	25.00			200.00	85.00	17000.0
30	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15	Mtr							
	40mm dia GI pipe		8	4.00			32.00	345.00	11040.0

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
24	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A. P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-15	Mtr							
			16	255.00			4080.00	188.70	769896.0
25	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KUWS & DB for year 2008-09	No							
			8				8	3000.00	24000.0
26	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15	Each							
			8				8	302.00	2416.0
27	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15	Mtr							
			8	30.00			240.00	140.40	33696.0
28	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15	Mtr							
			8	30.00			240.00	10.80	2592.0
29	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete. (As per Civil SR KSRB I-2, P-7) P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15	Mtr							
	For Cutting Road Surface		8	25.00			200.00	85.00	17000.0
30	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15	Mtr							
	40mm dia GI pipe		8	4.00			32.00	345.00	11040.0

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
31	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., P. No. 62 / I.No. 7.13.2 KPWD Electrical SR 2014-15	No.							
	16Sqmm		8				8.00	280.00	2240.0
32	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia, (P No. 55, I No. 7.1) KPWD Electrical SR 2014-15	No							
			8				8	2727.00	21816.0
33	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15	No.							
	32 Amps		48				48	180.00	8640.0
34	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page No. 93 Item No. 13.55 / PWD SR 2016-17	Nos							
			8				8	1615.68	12925.0
	Basic Rate	1496.00							
	Area Weightage @ 8%	119.68							
	Total	1615.68							
35	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. P. No. 95 / I. No. 13.81.3 PWD SR 2016-7	No							
	50mm dia		8				8	232.20	1858.0
	Basic Rate	215.00							
	Area Weightage @ 8%	17.20							
	Total	232.20							
36	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc complete	No							
			8	4.00			32	80.00	2560.0

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
37	Supplying shunt capacitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications	No							
			8				8	350.00	2800.0
38	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required conforming to IEC 60898. 5-32Amps TPN P No. 47 / I No.6.16.5 KPWD SR 2014-15	No							
			8				8	1547.00	12376.0
39	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete P.No. 49, I. No. 6.40.2 KPWD Electrical SR 2014-15	Sq.Cm							
	16SWG		16	120.00	60.00		115200		
			8	300.00	25.00		60000		
							175200	0.33	57816.0
40	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. 12.5HP to 15 HP Star Delta Starter SERDED Rate	No.							
			8				8	11000	88000.0
41	Earthwork excavation for pipeline trenches including deporiting or bank up to a lead of 50 mtrs including shiriry and statting danger lighting and using site rails and boming poles at every 100 mtrs wherever necessary as directed in th following structure manhole. Page No. 01/ Item No.1.2.2 / PRED SR 2012 13 Hard Soil	Cum							
			8	60.00	0.60	0.75	216.00		
							216.00	188.00	40608.0
	Basic Rate	188.00							

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
42	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and including lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the excavation Etc., Page No.15 item No.3.4.2 b PRED SR 2012-13.	Rmtr							
	75 mm dia 6 KSC PVC pipe		8	60.00			480.00		
							480.00	157.00	75360.0
43	Refilling the basement and pipeline treanches with seclcted available earthe for trench excavation including authority condition in layers from thedi including disponsary of the surplus earth with a heavy 200 mtrs Page No. 3 / Item No. 1.6 / PRED SR 2012-13	Cum							
	Basic Rate	61.00					216.00	61.00	13176.0
44	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 P. 92 / I.13.37 PWD SR 2016-17	Each							
			16				16	2216.16	35459.0
	Basic Rate	2052.00							
	Area Weightage @ 8%	164.16							
	Total	2216.16							
	Water Supply								
45	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5(P.No.4, I.No.2.3 of PW,								
	For Water Supply								
		Cum							
	Nagakaliamma Temple rd		1	90.00	0.30	0.70	18.90		
	Durgamba Road		1	290.00	0.30	0.70	60.90		
	Road 1		1	160.00	0.30	0.70	33.60		
	Masjid Road		1	155.00	0.30	0.70	32.55		
	Road 2		1	80.00	0.30	0.70	16.80		
							162.75	200.34	32605.34
46	Providing and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kgf/sq.cm working pressure chemp plast / Wavin or equivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials,with 160mm outer dia.(P.No.75,sl.No.11.56.4 of PW, P&IWTD SR 2016-17)								
		m							
	Nagakaliamma Temple rd		1	90.00			90.00		
	Durgamba Road		1	290.00			290.00		
	Road 1		1	160.00			160.00		
	Masjid Road		1	155.00			155.00		
	Road 2		1	80.00			80.00		
							775.00	1537.00	1191175.00

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
47	KSRB 2.6 : Providing and filling sand in foundation upto plinth to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications. specification. No. KBS 2.10.2(P.No.6,sl.No.2.13 of PW, P&IWD SR 2016-17)								
		Cum							
	Nagakaliamma Temple rd		1	90.00	0.30	0.40	10.80		
	Durgamba Road		1	290.00	0.30	0.40	34.80		
	Road 1		1	160.00	0.30	0.40	19.20		
	Masjid Road		1	155.00	0.30	0.40	18.60		
	Road 2		1	80.00	0.30	0.40	9.60		
	Deduct pipe		-1	540.00	0.02		-10.86		
							82.14	2263.10	185900.12
48	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications.(P.No.4, I.No.2.11 of PW, P&IWD SR 2016-17)								
	For Water Supply	Cum							
	Nagakaliamma Temple rd		1	90.00	0.30	0.30	8.10		
	Durgamba Road		1	290.00	0.30	0.30	26.10		
	Road 1		1	160.00	0.30	0.30	14.40		
	Masjid Road		1	155.00	0.30	0.30	13.95		
	Road 2		1	80.00	0.30	0.30	7.20		
							69.75	80.56	5619.06
49	KSRB13-3.6 : Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.6.(P.No.90, I.No.13.15 of PW, P&IWD SR 2016-17)								
		m							
	Nagakaliamma Temple rd		8	1.60			12.80		
	Durgamba Road		24	1.60			38.40		
	Road 1		12	1.60			19.20		
	Masjid Road		12	1.60			19.20		
	Road 2		6	1.60			9.60		
							99.20	457.92	45425.66
							Total Construction Cost		9803472.985
50							Cost towards Preparation of DPR LS		98035.00
51							Cost towards PMC / Third Party inspection LS		98035.00
							Sub Total		9999542.99
52							Miscellaneous and rounding off		457.01
							Total		10000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.



Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Byelaw Division
Yalahanka Zone, B.B.M.P.
Bangalore-560092



BRUHAT BANGALORE MAHANAGARA PALIKE

Project: 5.Improvement of Drains and Asphaltting to Road at Amarajoythi Layout Main Road Left and Right Side Cross Roads in Ward No.06(Thanisandra). Byatarayanapura Sub Division

									Est Cost: =100.0 Lakh	
Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.	
1	KSRRB 200-8. Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications. MORTH / Chapter 2 (P.No.136, I.No.18.11 of PW, P&IWTD SR 2016-17)									
	Vegetation Clearance	Cum								
	Amarajoythi Nagar-Thanisandra MainRoad									
	6th cross-Pit Stop Road		2	180.00	1.50		540.00			
	5th cross Road- Left to Pit stop		2	160.00	1.50		480.00			
	Amarajoythi Layout									
	3rd Cross Road		2	80.00	1.50		240.00			
	2nd Cross Road		2	80.00	1.50		240.00			
							1500.00	6.36	9540.00	
2	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)									
	Desilt	Cum								
	Amarajoythi Nagar-Thanisandra MainRoad									
	4th cross-Soudemandi Road		2	160.00	0.60	0.60	115.20			
	2nd Cross Road		2	160.00	0.60	0.60	115.20			
	1st Cross Road		2	160.00	0.60	0.60	115.20			
	Amarajoythi Layout									
	1st Cross Road		1	80.00	0.60	0.60	28.80			
	Nagakallamman Temple Street Opp Roads									
	1st Cross Road		2	120.00	0.60	0.60	86.40			
	2nd Cross Road		2	125.00	0.60	0.60	90.00			
	3rd Cross Road		2	125.00	0.60	0.60	90.00			
	4th Cross Road		2	125.00	0.60	0.60	90.00			
	New BS Drain									
	Amarajoythi Nagar-Thanisandra MainRoad									
	6th cross-Pit Stop Road		2	180.00	0.75	0.60	162.00			
	5th cross Road- Left to Pit stop		2	160.00	0.75	0.60	144.00			
	Amarajoythi Layout									
	3rd Cross Road		2	80.00	0.75	0.60	72.00			
	2nd Cross Road		2	80.00	0.75	0.60	72.00			
							1180.80	202.92	239607.94	
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)									
	Amarajoythi Nagar-Thanisandra MainRo	Sqm								
	4th cross-Soudemandi Road		2	160.00	1.80		576.00			
	2nd Cross Road		2	160.00	1.80		576.00			
	1st Cross Road		2	160.00	1.80		576.00			
	Amarajoythi Layout									
	1st Cross Road		1	80.00	1.80		144.00			
	Nagakallamman Temple Street Opp Roads									
	1st Cross Road		2	120.00	1.80		432.00			
	2nd Cross Road		2	125.00	1.80		450.00			
	3rd Cross Road		2	125.00	1.80		450.00			
	4th Cross Road		2	125.00	1.80		450.00			
	Consider 40% For R&R						1461.60			
	Consider 25% for Damaged and Missing Slabs						-365.40			
	BS Cover		2	250.00	1.20		600.00			

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Consider 25% for Damaged and Missing Slabs						-150.00		
							1546.20	80.56	124561.87
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTDR SR 2016-17)								
	For BS Slab Drain	Sqm							
	Amarajyothi Nagar-Thanisandra MainRoad								
	6th cross-Pit Stop Road		2	180.00	1.80		648.00		
	5th cross Road- Left to Pit stop		2	160.00	1.80		576.00		
	Amarajyothi Layout								
	3rd Cross Road		2	80.00	1.80		288.00		
	2nd Cross Road		2	80.00	1.80		288.00		
	Consider 25% for Damaged and Missing Slabs						365.40		
							2165.40	665.68	1441463.47
5	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTDR SR 2016-17)								
	For BS Slab Drain for Cover	Sqm							
	Consider 25% for Damaged and Missing Slabs						150.00		
							150.00	825.74	123861.00
6	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTDR SR 2016-17)								
	Road Portion	Cum							
	Amarajyothi Nagar-Thanisandra MainRoad								
	6th cross-Pit Stop Road		1	180.00	5.80	0.23	240.12		
	5th cross Road- Left to Pit stop		1	160.00	8.50	0.23	312.80		
	Amarajyothi Layout								
	3rd Cross Road		1	80.00	5.00	0.23	92.00		
	2nd Cross Road		1	80.00	5.80	0.23	106.72		
	CC Road								
	1st A Cross		1	40.00	3.50	0.25	35.00		
	1st B Cross		1	40.00	3.20	0.25	32.00		
	1st C Cross		1	40.00	3.80	0.25	38.00		
	Bad Reaches								
			8	2.20	2.50	0.23	10.12		
			12	1.80	1.90	0.23	9.44		
			14	1.00	1.00	0.23	3.22		
							879.42	164.76	144893.11
7	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density,complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTDR SR 2016-17)								
	Amarajyothi Nagar-Thanisandra MainRoad	Cum							
	6th cross-Pit Stop Road		1	180.00	5.80	0.23	240.12		
	5th cross Road- Left to Pit stop		1	160.00	8.50	0.23	312.80		
	Amarajyothi Layout								
	3rd Cross Road		1	80.00	5.00	0.23	92.00		
	2nd Cross Road		1	80.00	5.80	0.23	106.72		
	Bad Reaches								
			8	2.20	2.50	0.23	10.12		
			12	1.80	1.90	0.23	9.44		
			14	1.00	1.00	0.23	3.22		

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
							774.42	1768.08	1369235.10
8	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWD SR 2016-17)								
	Amarajyothi Nagar-Thanisandra MainR Cum								
	6th cross-Pit Stop Road		1	180.00	5.80	--	1044.00		
	5th cross Road- Left to Pit stop		1	160.00	8.50	--	1360.00		
	Amarajyothi Layout								
	3rd Cross Road		1	80.00	5.00	--	400.00		
	2nd Cross Road		1	80.00	5.80	--	464.00		
	Bad Reaches								
			8	2.20	2.50	--	44.00		
			12	1.80	1.90	--	41.04		
			14	1.00	1.00	--	14.00		
							3367.04	27.56	92795.62
9	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWD SR 2016-17)								
	Amarajyothi Nagar-Thanisandra MainRoa Sqm								
	4th cross-Soudemandi Road		1	160.00	4.80		768.00		
	2nd Cross Road		1	160.00	4.50		720.00		
	1st Cross Road		1	160.00	5.00		800.00		
	Amarajyothi Layout								
	1st Cross Road		1	80.00	5.50		440.00		
	Nagakallamman Temple Street Opp Roads								
	1st Cross Road		1	120.00	4.80		576.00		
	2nd Cross Road		1	125.00	5.00		625.00		
	3rd Cross Road		1	125.00	4.80		600.00		
	4th Cross Road		1	125.00	5.00		625.00		
	Bell Mouth		14	5	6.00		420.00		
	Deduct Prime Coat for Bad Reaches						-99.04		
							5474.96	3.18	17410.37
10	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWD SR of 2016-17)								
	Sqm								
	For Laying BC								
	Amarajyothi Nagar-Thanisandra MainRoad								
	6th cross-Pit Stop Road		1	180.00	5.80	--	1044.00		
	5th cross Road- Left to Pit stop		1	160.00	8.50	--	1360.00		
	4th cross-Soudemandi Road		1.00	160.00	4.80	--	768.00		
	2nd Cross Road		1.00	160.00	4.50	--	720.00		
	1st Cross Road		1.00	160.00	5.00	--	800.00		
	Amarajyothi Layout								
	3rd Cross Road		1	80.00	5.00	--	400.00		
	2nd Cross Road		1	80.00	5.80	--	464.00		
	1st Cross Road		1	80.00	5.50	--	440.00		
	Nagakallamman Temple Street Opp Roads								
	1st Cross Road		1.00	120.00	4.80	--	576.00		
	2nd Cross Road		1.00	125.00	5.00	--	625.00		
	3rd Cross Road		1.00	125.00	4.80	--	600.00		
	4th Cross Road		1.00	125.00	5.00	--	625.00		
	Bell Mouth		14.00	5.00	6.00	--	420.00		
							8842.00	12.72	112470.24

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWD S.R 2016-17)								
	Cum								
	Amarajyothi Nagar-Thanisandra MainRoad								
	6th cross-Pit Stop Road		1	180.00	5.80	0.04	41.76		
	5th cross Road- Left to Pit stop		1	160.00	8.50	0.04	54.40		
	4th cross-Soudemandi Road		1	160.00	4.80	0.04	30.72		
	2nd Cross Road		1	160.00	4.50	0.04	28.80		
	1st Cross Road		1	160.00	5.00	0.04	32.00		
	Amarajyothi Layout								
	3rd Cross Road		1	80.00	5.00	0.04	16.00		
	2nd Cross Road		1	80.00	5.80	0.04	18.56		
	1st Cross Road		1	80.00	5.50	0.04	17.60		
	Nagakallamman Temple Street Opp Roads								
	1st Cross Road		1.00	120.00	4.80	0.04	23.04		
	2nd Cross Road		1.00	125.00	5.00	0.04	25.00		
	3rd Cross Road		1.00	125.00	4.80	0.04	24.00		
	4th Cross Road		1.00	125.00	5.00	0.04	25.00		
	Bell Mouth		14.00	5.00	6.00	0.04	16.80		
							353.68	8118.54	2871365.23
15	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWD SR 2016-17)								
	Edge line	Sqm	2	1555.00	0.10	--	311.00		
							311.00	542.72	168785.92
11	KSRRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWD S.R 2016-17)								
	Bed Concrete	Cum							
	Amarajyothi Layout								
	CC Road								
	1st A Cross		1	40.00	3.50	0.15	21.00		
	1st B Cross		1	40.00	3.20	0.15	19.20		
	1st C Cross		1	40.00	3.80	0.15	22.80		
							63.00	5348.76	336971.88
12	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rakers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) ((P.No.177, I.No.22.6.1 of PW,P&IWD SR 2016-17)								
	Road Portion	Cum							
	Amarajyothi Layout								

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	CC Road								
	1st A Cross		1.00	40.00	3.50	0.10	14.00		
	1st B Cross		1.00	40.00	3.20	0.10	12.80		
	1st C Cross		1.00	40.00	3.80	0.10	15.20		
							42.00	6217.96	261154.32
13	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWD SR 2016-17)								
	Amarajyothi Layout	Sqm							
	CC Road								
	1st A Cross		1.00	40.00	3.50	--	140.00		
	1st B Cross		1.00	40.00	3.20	--	128.00		
	1st C Cross		1.00	40.00	3.80	--	152.00		
							420.00	95.40	40068.00
	Bore Well								
16	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging technical personal and labour required etc., as per Specification and direction (P.48, I. 9.4) PRED.SR 2012-13	Each BW	4				4	1882.00	7528.00
17	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13	Rmtr	4	50.00			200.00	306.00	61200.00
	0 to 50 m		4	50.00			200.00	400.00	80000.00
	50 to 100 m		4	50.00			200.00	445.00	89000.00
	100 to 150 m		4	50.00			200.00	470.00	94000.00
	150 to 200 m		4	50.00			200.00	544.00	108800.00
	200 to 250 m		4	50.00			200.00	583.00	116600.00
	250 to 300 m		4	50.00			200.00	622.00	124400.00
	300 to 350 m		4	50.00			200.00	658.00	131600.00
	Above 350m		4	50.00			200.00		

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
18	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming to IS 554/1985, one end fixed with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and duties) Prices include Collar-medium duty P. iii, I No. 84 PRED SR 2012-13	Rmtr							
			4	50.00			200.00	1325.00	265000.00
19	Providing 250mm dia PVC Pipe 6kg/cm SE PRED Approved Rate	Rmtr							
			4	18.00			72.00	754.47	54321.84
20	Providing and fixing 160mm Borewell Cap P. iii, I No. 85	Each							
			4				4	100.00	400.00
21	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for operation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required accessories such as suction, casing suction strainers sand guard Non return valve etc. complete. The pump and motor shall form an integral unit with all the required fittings 12.50 HP 25 stage. ATALANTA< SUGNA< CRI, KIRLOSKAR and other Equivalent Pumps PWD SR 2016-17 P. XXXXII Item No. 24 including of all taxes	No							
	17.5 HP 30 Stage		4				4	74300	297200.00
22	Supplying of ISI marked galvanized mild steel tube (continuously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaded at one end and the other end protected as per specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendment 1-5 and with all its latest amendments if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008	Rmtr							
			4	250.00			1000.00	375.00	375000.00
23	Heavy Duty Collar 50 mm dia	Nos	176				176	130.00	22880.00

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
24	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A. P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-15	Mtr							
			8	255.00			2040.00	188.70	384948.00
25	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KUWS & DB for year 2008-09	No							
			4				4	3000.00	12000.00
26	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15	Each							
			4				4	302.00	1208.00
27	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS: 3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15	Mtr							
			4	30.00			120.00	140.40	16848.00
28	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15	Mtr							
			4	30.00			120.00	10.80	1296.00
29	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15	Mtr							
	For Cutting Road Surface		4	25.00			100.00	85.00	8500.00
30	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15	Mtr							
	40mm dia GI pipe		4	4.00			16.00	345.00	5520.00

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
31	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., P. No. 62 / I.No. 7.13.2 KPWD Electrical SR 2014-15	No.							
	16Sqmm		4				4.00	280.00	1120.00
32	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia, (P No. 55, I No. 7.1) KPWD Electrical SR 2014-15	No	4				4	2727.00	10908.00
33	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15	No.	24				24	180.00	4320.00
34	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page No. 93 Item No. 13.55 / PWD SR 2016-17	Nos	4				4	1615.68	6462.72
	Basic Rate		1496.00						
	Area Weightage @ 8%		119.68						
	Total		1615.68						
35	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. P. No. 95 / I. No. 13.81.3 PWD SR 2016-7	No	4				4	232.20	928.80
	50mm dia		4						
	Basic Rate		215.00						
	Area Weightage @ 8%		17.20						
	Total		232.20						
36	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc complete	No	4	4.00			16	80.00	1280.00
37	Supplying shunt capacitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications	No	4				4	350.00	1400.00

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
38	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required conforming to IEC 60898. 5-32Amps TPN P No. 47 / I No.6.16.5 KPWD SR 2014-15	No							
			4				4	1547.00	6188.00
39	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete P.No. 49, I. No. 6.40.2 KPWD Electrical SR 2014-15	Sq.Cm							
	16SWG		8	120.00	60.00		57600		
			4	300.00	25.00		30000		
40	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided, the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. 12.5HP to 15 HP Star Delta Starter SERDED Rate	No.					87600	0.33	28908.00
			4				4	11000	44000.00
41	Earthwork excavation for pipeline trenches including deporting or bank up to a lead of 50 mtrs including shiriry and statting danger lighting and using site rails and boring poles at every 100 mtrs wherever necessary as directed in th following strstructure manhole. Page No. 01/ Item No.1.2.2 / PRED SR 2012-13 Hard Soil	Cum							
			4	60.00	0.60	0.75	108.00		
	Basic Rate	188.00					108.00	188.00	20304.00
42	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and includng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., Page No.15 item No.3.4.2 b PRED SR 2012-13.	Rmtr							
	75 mm dia 6 KSC PVC pipe		4	60.00			240.00		
							240.00	157.00	37680.00

Certificate.

- Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer



BRUHAT BANGALORE MAHANAGARA PALIKE

**Project: 6.Improvement Road Drains at Anjanadri Layout Cross Roads in Ward no.06(Thanisandra).
Byatarayanapura Sub Division**

								Est Cost: =30.0Lakh	
Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
1	KSRRB M200-13.1. Dismantling of existing structures like culverts, Bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. II. By mechanical means, A. Cement concrete Grade M-15 & M-20 (P.No.136, I.No.18.20 of PW,P&IWTD SR 2015-16)								
	Road	Cum							
	Masjid Parallel Rd		1	100.00	4.30	0.20	86.00		
							86.00	482.45	41490.70
2	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Anjanadri layout Road		1	140.00	0.60	0.60	50.40		
	Masjid Road		2	115.00	0.60	0.60	82.80		
	Cross Road in Masjin Road		1	50.00	0.60	0.60	18.00		
	Nagakaliamma Temple Street Cs		1	90.00	0.60	0.60	32.40		
	New Drain								
	Masjid Parallel Rd		1	145.00	0.75	0.50	54.38		
	Masjid Road		2	40.00	0.75	0.50	30.00		
	Cross Road in Masjin Road		1	50.00	0.75	0.50	18.75		
	Nagakaliamma Temple Street Cs		1	90.00	0.75	0.50	33.75		
							320.48	202.92	65030.79
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
		Sqm							
	Anjanadri layout Road		1	140.00	1.35		189.00		
	Masjid Road		2	115.00	1.35		310.50		
	Cross Road in Masjin Road		1	50.00	1.35		67.50		
	Nagakaliamma Temple Street Cs		1	90.00	1.35		121.50		
	Consider 30% for R&R						206.55		
	Consider 20% for Damaged and Missing Slabs						-41.31		
							165.24	80.56	13311.73
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Masjid Parallel Rd		1	145.00	1.35		195.75		
	Masjid Road		2	40.00	1.35		108.00		
	Cross Road in Masjin Road		1	50.00	1.35		67.50		
	Nagakaliamma Temple Street Cs		1	90.00	1.35		121.50		
	Consider 20% for Damaged and Missing Slabs						41.31		
							534.06	665.68	355513.06

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
5	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWD S.R 2016-17)								
	Road Portion	Cum							
	Anjanadri layout Road								
	Anjanadri layout Road		1	140.00	5.70	0.23	183.54		
	Masjid Parallel Rd		1.00	145.00	3.50	0.25	126.88		
	Masjid Road		1.00	40.00	5.50	0.23	50.60		
	Cross Road in Masjin Road		1.00	50.00	5.00	0.23	57.50		
	Nagakaliamma Temple Street Cs		1.00	90.00	5.20	0.23	107.64		
							526.16	164.76	86689.30
6	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWD SR 2016-17)								
	Anjanadri layout Road	Cum							
	Anjanadri layout Road		1	140.00	5.70	0.23	183.54		
	Masjid Road		1	40.00	5.50	0.23	50.60		
	Cross Road in Masjin Road		1	50.00	5.00	0.23	57.50		
	Nagakaliamma Temple Street Cs		1	90.00	5.20	0.23	107.64		
							399.28	1768.08	705958.98
7	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWD SR 2016-17)								
	Anjanadri layout Road	Cum							
	Anjanadri layout Road		1	140.00	5.70	--	798.00		
	Masjid Road		1	40.00	5.50	--	220.00		
	Cross Road in Masjin Road		1	50.00	5.00	--	250.00		
	Nagakaliamma Temple Street Cs		1	90.00	5.20	--	468.00		
							1736.00	27.56	47844.16
8	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWD SR 2016-17)								
		Sqm							
	Masjid Road		1	115.00	5.50	--	632.50		
							632.50	3.18	2011.35
9	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWD SR of 2016-17)								
		Sqm							
	For Laying BC								
	Anjanadri layout Road		1.00	140.00	5.70	--	798.00		
	Masjid Road		1.00	155.00	5.50	--	852.50		
	Cross Road in Masjin Road		1.00	50.00	5.00	--	250.00		
	Nagakaliamma Temple Street Cs		1.00	90.00	5.20	--	468.00		
							2368.50	12.72	30127.32

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
10	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
		Cum							
	Anjanadri layout Road		1	140.00	5.70	0.04	31.92		
	Masjid Road		1	155.00	5.50	0.04	34.10		
	Cross Road in Masjin Road		1	50.00	5.00	0.04	10.00		
	Nagakaliamma Temple Street Cs		1	90.00	5.20	0.04	18.72		
							94.74	8118.54	769150.48
11	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line	Sqm	2	435.00	0.10	--	87.00		
							87.00	542.72	47216.64
12	KSRRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Bed Concrete	Cum							
	CC Road								
	Masjid Parallel Rd		1	145.00	3.50	0.15	76.13		
							76.13	5348.76	407174.36
13	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) ((P.No.177, I.No.22.6.1 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
	CC Road								
	Masjid Parallel Rd		1.00	145.00	3.50	0.10	50.75		
							50.75	621	

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
14	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWTD SR 2016-17)								
	CC Road	Sqm							
	Masjid Parallel Rd		1.00	145.00	3.50	--	507.50		
							507.50	95.40	48415.50
							Total Construction Cost		2935495.836
15							Cost towards Preparation of DPR LS		29355.00
16							Cost towards PMC / Third Party inspection LS		29355.00
							Sub Total		2994205.84
17							Miscellaneous and rounding off		5794.16
							Total		3000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Byahat Division
Yalahanka Zone, B.B.M.P.
Bangalore-560002



BRUHAT BANGALORE MAHANAGARA PALIKE

**Project: 7.Improvements to Road and Drains at Thanisandra Munisonnegowda Layout in Ward
No.06(Thanisandra), Byatarayanapura Sub Division**

								Est Cost: =35.0Lakh	
Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Munisonnegowda Layout								
	Kateramma Temple Opp Rd		2	105.00	0.60	0.60	75.60		
	1st Cross Road		1	100.00	0.60	0.60	36.00		
	2nd Cross Road		1	90.00	0.60	0.60	32.40		
	3rd Cross Road		1	85.00	0.60	0.60	30.60		
	Kateramma Temple Mn Rd		1	90.00	0.60	0.60	32.40		
			2	60.00	0.60	0.60	43.20		
	Kateramma Temple Beside Rd		1	90.00	0.60	0.60	32.40		
	3rd Main Road		2	185.00	0.60	0.60	133.20		
	4th Main Road		2	170.00	0.60	0.60	122.40		
	5th Main Road		2	195.00	0.60	0.60	140.40		
	6th Main Road		2	180.00	0.60	0.60	129.60		
							808.20	202.92	163999.94
2	Removing and resetting of footpath slab (P.No.265, I.No.37.56 of PW, P&IWTD SR 2016-17)								
	Kateramma Temple Mn Rd		1.00	90.00	1.20	--	108.00		
	Damaged slabs/missing 20%						-21.60		
							86.40	132.5	11448.00
3	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Cover Slab	Sqm							
	Damaged slabs/missing 20%						21.60		
							21.60	1738.00	37540.80
4	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	Munisonnegowda Layout	Sqm							
	1st Cross Road		1	100.00	1.80		180.00		
	2nd Cross Road		1	90.00	1.80		162.00		
	3rd Cross Road		1	85.00	1.80		153.00		
							495.00		
	Consider 30% for Damaged and Missing Slabs						-148.50		
	BS Cover		1	250.00	1.20		300.00		
	Consider 20% for Damaged and Missing Slabs						-60.00		
							586.50		
5	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Consider 30% for Damaged and Missing Slabs						148.50		
							148.50	665.68	98853.48

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
6	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Consider 20% for Damaged and Missing Slabs						60.00		
							60.00	825.74	49544.40
7	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWD S.R 2016-17)								
	Road Portion	Cum							
	Munisonnegowda Layout								
	Kateramma Temple Beside Rd		1.00	90.00	5.00	0.23	103.50		
	Bad Reaches		6.00	2.80	2.50	0.23	9.66		
			12.00	2.00	1.80	0.23	9.94		
			15.00	1.50	1.50	0.23	7.76		
							130.86	164.76	21560.25
8	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWD SR 2016-17)								
	Munisonnegowda Layout	Cum							
	Kateramma Temple Beside Rd		1.00	90.00	5.00	0.23	103.50		
	Bad Reaches		6.00	2.80	2.50	0.23	9.66		
			12.00	2.00	1.80	0.23	9.94		
			15.00	1.50	1.50	0.23	7.76		
							130.86	1768.08	231368.30
9	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWD SR 2016-17)								
	Munisonnegowda Layout	Cum							
	Kateramma Temple Beside Rd		1.00	90.00	5.00	--	450.00		
	Bad Reaches		6.00	2.80	2.50	--	42.00		
			12.00	2.00	1.80	--	43.20		
			15.00	1.50	1.50	--	33.75		
							568.95	27.56	15680.26
10	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWD SR 2016-17)								
	Munisonnegowda Layout	Sqm							
	Kateramma Temple Opp Rd		1.00	105.00	8.40	--	882.00		
	1st Cross Road		1.00	100.00	6.20	--	620.00		
	2nd Cross Road		1.00	90.00	5.00	--	450.00		
	3rd Cross Road		1.00	85.00	5.30	--	450.50		
	Kateramma Temple Mn Rd		1.00	150.00	5.20	--	780.00		
	3rd Main Road		1.00	185.00	5.50	--	1017.50		
	4th Main Road		1.00	170.00	5.60	--	952.00		
	5th Main Road		1.00	195.00	5.40	--	1053.00		
	6th Main Road		1.00	180.00	5.50	--	990.00		
							7195.00		
	Deduct prime coat for Bad Reaches						-118.95		
							7076.05	3.18	22501.84

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
11	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
		Sqm							
	For Laying BC								
	Kateramma Temple Opp Rd		1	105.00	8.40	--	882.00		
	1st Cross Road		1	100.00	6.20	--	620.00		
	2nd Cross Road		1	90.00	5.00	--	450.00		
	3rd Cross Road		1	85.00	5.30	--	450.50		
	Kateramma Temple Mn Rd		1	150.00	5.20	--	780.00		
	Kateramma Temple Beside Rd		1	90.00	5.00	--	450.00		
	3rd Main Road		1	185.00	5.50	--	1017.50		
	4th Main Road		1	170.00	5.60	--	952.00		
	5th Main Road		1	195.00	5.40	--	1053.00		
	6th Main Road		1	180.00	5.50	--	990.00		
							7645.00	12.72	97244.40
12	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
		Cum							
	Kateramma Temple Opp Rd		1	105.00	8.40	0.04	35.28		
	1st Cross Road		1	100.00	6.20	0.04	24.80		
	2nd Cross Road		1	90.00	5.00	0.04	18.00		
	3rd Cross Road		1	85.00	5.30	0.04	18.02		
	Kateramma Temple Mn Rd		1	150.00	5.20	0.04	31.20		
	Kateramma Temple Beside Rd		1	90.00	5.00	0.04	18.00		
	3rd Main Road		1	185.00	5.50	0.04	40.70		
	4th Main Road		1	170.00	5.60	0.04	38.08		
	5th Main Road		1	195.00	5.40	0.04	42.12		
	6th Main Road		1	180.00	5.50	0.04	39.60		
							305.80	8118.54	2482649.53

Sl. No.		Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
13	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&I WTD SR 2016-17)								
	Edge line	Sqm	2	1350.00	0.10	--	270.00		
							270.00	542.72	146534.40
							Total Construction Cost		3426174.040
14							Cost towards Preparation of DPR LS		34262.00
15							Cost towards PMC / Third Party inspection LS		34262.00
							Sub Total		3494698.04
16							Miscellaneous and rounding off		5301.96
							Total		3500000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Executive Engineer

Byatarayana Division

Taluk: B.B.M.P.

Bangalore - 560002



BRUHAT BANGALORE MAHANAGARA PALIKE

Project:8. Improvement to Roads and Drains at Hunnasemarada Krishnappa Layout in Ward No.06(Thanisandra), Byatarayanapura Sub Division

							Est Cost: =30.0Lakh		
Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Hunnasemarada Krishnappa Layout								
	7th Cross Road(ITI Narayanaswamy Rd)		1	228.00	0.60	0.50	68.40		
	6th Cross Road		1	275.00	0.60	0.50	82.50		
	8th Cross Road		1	320.00	0.60	0.50	96.00		
	5th Cross Road		1	260.00	0.60	0.50	78.00		
							324.90	202.92	65928.71
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	Hunnasemarada Krishnappa Layout	Sqm							
	7th Cross Road(ITI Narayanaswamy Rd)		1.00	228.00	1.80		410.40		
	6th Cross Road		1.00	275.00	1.80		495.00		
	8th Cross Road		1.00	320.00	1.80		576.00		
	5th Cross Road		1.00	260.00	1.80		468.00		
	Consider 30% for R&R						584.82		
	Consider 20% for Damaged and Missing Slabs						-116.96		
	Bs Cover		1	200.00	1.20		240.00		
	Consider 20% for Damaged and Missing Slabs						-48.00		
							659.86	80.56	53158.00
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Consider 20% for Damaged and Missing Slabs						116.96		
							116.96	665.68	77860.60
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17)								
	For BS Slab Drain Cover	Sqm							
	Consider 20% for Damaged and Missing Slabs						48.00		
							48.00		
5	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	Hunnasemarada Krishnappa Layout								
	7th Cross Road(ITI Narayanaswamy		1.00	228.00	4.80	0.23	251.71		
	Bad Reaches		7.00	2.00	2.50	0.23	8.05		
			8.00	1.80	1.80	0.23	5.96		

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
			12.00	0.60	1.50	0.23	2.48		
							268.21	164.76	44189.88
6	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTDR SR 2016-17)								
	Road Portion	Cum							
	Hunnasamarada Krishnappa Layout								
	7th Cross Road(ITI Narayanaswamy Rd)		1	228.00	4.80	0.23	251.71		
	Bad Reaches		7	2.00	2.50	0.23	8.05		
			8	1.80	1.80	0.23	5.96		
			12	0.60	1.50	0.23	2.48		
							268.21	1768.08	474212.49
7	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgl/sqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTDR SR 2016-17)								
	Road Portion	Cum							
	Hunnasamarada Krishnappa Layout								
	7th Cross Road(ITI Narayanaswamy Rd)		1.00	228.00	4.80	--	1094.40		
	Bad Reaches		7.00	2.00	2.50	--	35.00		
			8.00	1.80	1.80	--	25.92		
			12.00	0.60	1.50	--	10.80		
							1166.12	27.56	32138.27
8	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTDR SR 2016-17)								
	Road Portion	Sqm							
	6th Cross Road		1.00	275.00	5.60	--	1540.00		
	8th Cross Road		1.00	320.00	5.80	--	1856.00		
	5th Cross Road		1.00	260.00	5.70	--	1482.00		
	Deduct Prime Coat for Bad Reaches						-71.72		
							4806.28	3.18	15283.97
9	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTDR SR of 2016-17)								
	Hunnasamarada Krishnappa Layout	Sqm							
	For Laying BC								
	7th Cross Road(ITI Narayanaswamy Rd)		1.00	228.00	4.80	--	1094.40		
	6th Cross Road		1.00	275.00	5.60	--	1540.00		
	8th Cross Road		1.00	320.00	5.80	--	1856.00		
	5th Cross Road		1.00	260.00	5.70	--	1482.00		
							5972.40	12.72	75968.93

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
10	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWT D S.R 2016-17)								
	Hunnasemarada Krishnappa Layout	Cum							
	For Laying BC								
	7th Cross Road(ITI Narayanaswamy Rd)		1.00	228.00	4.80	0.04	43.78		
	6th Cross Road		1.00	275.00	5.60	0.04	61.60		
	8th Cross Road		1.00	320.00	5.80	0.04	74.24		
	5th Cross Road		1.00	260.00	5.70	0.04	59.28		
							238.90	8118.54	1939486.73
11	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWT D SR 2016-17)								
	Edge line	Sqm	2	1083.00	0.10	--	216.60		
							216.60	542.72	117553.15
							Total Construction Cost		2935416.246
12							Cost towards Preparation of DPR LS		29355.00
13							Cost towards PMC / Third Party inspection LS		29355.00
							Sub Total		2994126.25
14							Miscellaneous and rounding off		5873.75
							Total		3000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Byatary Division
Yalahanka Zone, B.M.P.
Bangalore-560002

**BRUHAT BANGALORE MAHANAGARA PALIKE****Project: 9.Improvement to Drains and Asphaltting to Roads at Anam Enclave Main Road in Ward No.06(Thanisandra). Byatarayanapura Sub Division**

								Est Cost: =50.0Lakh	
Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWD SR 2016-17)								
	Desilt	Cum							
	2nd Main Road		2	420.00	0.60	0.50	252.00		
	1st A Cross		2	70.00	0.60	0.50	42.00		
	2nd Cross		2	66.00	0.60	0.50	39.60		
	3rd Cross		2	65.00	0.60	0.50	39.00		
	4th Cross		2	61.00	0.60	0.50	36.60		
	5th Cross		2	55.00	0.60	0.50	33.00		
	Govt Primary School Opp Rd		1	57.00	0.60	0.50	17.10		
	New Culvert								
			12	6.00	2.00	1.20	172.80		
			1	11.00	2.00	1.20	26.40		
							658.50	202.92	133622.82
2	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWD S.R 2016-17)								
	Bed Concrete	Cum							
	New Culvert								
			12.00	6.00	2.00	0.15	21.60		
			1.00	11.00	2.00	0.15	3.30		
							24.90	5348.76	133184.12
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWD SR 2016-17)								
	Anam Enclave	Sqm							
	2nd Main Road		2	420.00	1.80		1512.00		
	1st A Cross		2	70.00	1.80		252.00		
	2nd Cross		2	66.00	1.80		237.60		
	3rd Cross		2	65.00	1.80		234.00		
	4th Cross		2	61.00	1.80		219.60		
	5th Cross		2	55.00	1.80		198.00		
	Govt Primary School Opp Rd		1	57.00	1.80		102.60		
							2755.80		
	Consider 20% for Damaged and Missing Slabs						-551.16		
							2204.64	80.56	177605.80
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Consider 20% for Damaged and Missing Slabs						551.16		
							551.16		
5	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. Specification No. KBS 5.1.13.(using available stones) (P.No.23, I.No.5.6 of PW, P&IWD S.R 2016-17)								

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	New Culvert	Cum							
		2	12	6	0.6	1.05	90.72		
		2	1	11	0.6	1.05	13.86		
							104.58	4438.22	464149.05
6	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&I WTD S.R 2016-17)								
	Dasarahalli Village	Cum							
		2	12	6.00		1.05	151.20		
		2	1	11.00		1.05	23.10		
							174.30	102.82	17921.53
7	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&I WTD S.R 2016-17)								
	Coping	Cum							
		2	12	6.00	0.60	0.100	8.64		
		2	1	11.00	0.60	0.100	1.32		
							9.96	5767.46	57443.90
8	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Culvert Slab	Sqm							
	Culvert Slab		12	6.00	1.80	--	129.60		
			1	11.00	1.80	--	19.80		
							149.40	4951.00	739679.40
9	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&I WTD S.R 2016-17)								
	Road Portion	Cum							
	Anam Enclave								
	Govt Primary School Opp Rd		1.00	57.00	6.20	0.23	81.28		
	2nd Cross		1.00	66.00	5.50	0.23	83.49		
	3rd Main Cross Rd		1.00	45.00	6.50	0.23	67.28		
	Bad Reaches		6.00	2.50	2.50	0.23	8.63		
			8.00	1.50	1.80	0.23	4.97		
			8.00	1.50	2.00	0.23	5.52		
							251.16	164.76	41381.12
10	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density,complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&I WTD SR 2016-17)								
	Anam Enclave	Cum							
	Govt Primary School Opp Rd		1.00	57.00	6.20	0.23	81.28		
	2nd Cross		1.00	66.00	5.50	0.23	83.49		
	3rd Main Cross Rd		1.00	45.00	6.50	0.23	67.28		
	Bad Reaches		6.00	2.50	2.50	0.23	8.63		
			8.00	1.50	1.80	0.23	4.97		
			8.00	1.50	2.00	0.23	5.52		

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
							251.16	1768.08	444070.97
11	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWD SR 2016-17)								
	Anam Enclave	Cum							
	Govt Primary School Opp Rd		1.00	57.00	6.20	--	353.40		
	2nd Cross		1.00	66.00	5.50	--	363.00		
	3rd Main Cross Rd		1.00	45.00	6.50	--	292.50		
	Bad Reaches		6.00	2.50	2.50	--	37.50		
			8.00	1.50	1.80	--	21.60		
			8.00	1.50	2.00	--	24.00		
							1092.00	27.56	30095.52
12	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWD SR 2016-17)								
	Anam Enclave	Sqm							
	2nd Main Road		1.00	420.00	10.00	--	4200.00		
	1st A Cross		1.00	70.00	5.00	--	350.00		
	3rd Cross		1.00	65.00	4.80	--	312.00		
	4th Cross		1.00	61.00	4.50	--	274.50		
	5th Cross		1.00	55.00	5.50	--	302.50		
	Deduct Prime Coat for Bad Reaches						-83.10		
							5355.90	3.18	17031.76
13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWD SR of 2016-17)								
	Anam Enclave	Sqm							
	For Laying BC								
	2nd Main Road		1.00	420.00	10.00	--	4200.00		
	1st A Cross		1.00	70.00	5.00	--	350.00		
	3rd Cross		1.00	65.00	4.80	--	312.00		
	4th Cross		1.00	61.00	4.50	--	274.50		
	5th Cross		1.00	55.00	5.50	--	302.50		
	Govt Primary School Opp Rd		1.00	57.00	6.20	--	353.40		
	2nd Cross		1.00	66.00	5.50	--	363.00		
	3rd Main Cross Rd		1.00	45.00	6.50	--	292.50		
							6447.90	12.72	82017.29
14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWD S.R 2016-17)								
	Anam Enclave	Cum							
	For Laying BC								
	2nd Main Road		1.00	420.00	10.00	0.04	168.00		
	1st A Cross		1.00	70.00	5.00	0.04	14.00		
	3rd Cross		1.00	65.00	4.80	0.04	12.48		
	4th Cross		1.00	61.00	4.50	0.04	10.98		
	5th Cross		1.00	55.00	5.50	0.04	12.10		
	Govt Primary School Opp Rd		1.00	57.00	6.20	0.04	14.14		
	2nd Cross		1.00	66.00	5.50	0.04	14.52		
	3rd Main Cross Rd		1.00	45.00	6.50	0.04	11.70		

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
							257.92	8118.54	2093901.36
15	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWD SR 2016-17)								
	Edge line	Sqm	2	839.00	0.10	--	167.80		
	Center Line		0.5	420.00	0.10	--	21.00		
							188.80	542.72	102465.54
	Total Construction Cost								4901466.362
16	Cost towards Preparation of DPR LS								49015.00
17	Cost towards PMC / Third Party inspection LS								49015.00
	Sub Total								4999496.36
18	Miscellaneous and rounding off								503.64
	Total								5000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Executive Engineer

Byatarajapur Division
Yalahanka Taluk, B.E.M.P.
Bangalore-560092



BRUHAT BANGALORE MAHANAGARA PALIKE

Project: 10.Improvement to Drains and Asphaltting to Roads at Sadiq Layout Main Road and cross Road in Ward No.06(Thanisandra). Byatarayanapura Sub Division

Est Cost: =50.0Lakh

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWD SR 2016-17)								
	Desilt	Cum							
	Sadiq Layout main Road		2	450.00	0.60	0.60	324.00		
	A Cross Road		1	80.00	0.60	0.60	28.80		
	B Cross Road		1	115.00	0.60	0.60	41.40		
	Golden Retreat Layout								
	1st Cross LHS		2	45.00	0.60	0.60	32.40		
	2nd Cross LHS		2	45.00	0.60	0.60	32.40		
	3rd Cross LHS		2	45.00	0.60	0.60	32.40		
	4th Cross LHS		2	45.00	0.60	0.60	32.40		
	New Culvert		11	6.80	2.00	1.20	179.52		
							703.32	202.92	142717.69
2	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWD S.R 2016-17)								
	Bed Concrete	Cum							
	New Culvert		11.00	6.80	2.00	0.15	22.44		
							22.44	5348.76	120026.17
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWD SR 2016-17)								
	Sadiq layout	Sqm							
	A Cross Road		1.00	80.00	1.80		144.00		
	B Cross Road		1.00	115.00	1.80		207.00		
	Golden Retreat Layout								
	1st Cross LHS		2.00	45.00	1.80		162.00		
	2nd Cross LHS		2.00	45.00	1.80		162.00		
	3rd Cross LHS		2.00	45.00	1.80		162.00		
	4th Cross LHS		2.00	45.00	1.80		162.00		
	Consider 50% for R&R						499.50		
	Consider 20% for Damaged and Missing Slabs						-99.90		
	Bs Cover		2.00	250.00	1.20		600.00		
	Consider Damaged and Missing Slabs						-120.00		
							879.60		
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWD SR 2016-17)								
	For BS Slab Drain	Sqm							
	Consider 20% for Damaged and Missing Slabs						99.90		
							99.90	665.68	66501.43

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
5	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTDR 2016-17)								
	For BS Slab Drain	Sqm							
	Bs Cover						120.00		
							120.00	825.74	99088.80
6	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. Specification No. KBS 5.1.13.(using available stones) (P.No.23, I.No.5.6 of PW, P&IWTDR 2016-17)								
	New Culvert	Cum							
		2	11	6.8	0.6	1.05	94.25		
							94.25	4438.22	418293.36
7	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTDR 2016-17)								
	New Culvert	Cum							
		2	11	6.80		1.05	157.08		
							157.08	102.82	16150.97
8	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTDR 2016-17)								
	Coping	Cum							
		2	11	6.80	0.60	0.100	8.98		
							8.98	5767.46	51768.72
9	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
		Sqm							
	Culvert Slab		11	6.80	1.80	--	134.64		
							134.64	4951.00	666602.64
10	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTDR 2016-17)								
	Road Portion	Cum							
	Sadiq layout								
	UGD Cutting								
	Sadiq Layout main Road		1.00	450.00	1.50	0.23	155.25		
	A Cross Road		1.00	80.00	4.80	0.23	88.32		
	B Cross Road		1.00	115.00	5.00	0.23	132.25		
	UGD Cutting								
	Golden Retreat Layout								
	1st Cross LHS		1.00	45.00	1.50	0.23	15.53		

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	2nd Cross LHS		1.00	45.00	1.50	0.23	15.53		
	3rd Cross LHS		1.00	45.00	1.50	0.23	15.53		
	4th Cross LHS		1.00	45.00	1.50	0.23	15.53		
	Bad Reaches		7.00	2.50	2.50	0.23	10.06		
			8.00	2.00	1.50	0.23	5.52		
			10.00	1.50	1.50	0.23	5.18		
							458.68	164.76	75571.70
11	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&I/WD SR 2016-17)								
	Sadiq layout	Cum							
	UGD Cutting								
	Sadiq Layout main Road		1.00	450.00	1.50	0.23	155.25		
	A Cross Road		1.00	80.00	4.80	0.23	88.32		
	B Cross Road		1.00	115.00	5.00	0.23	132.25		
	UGD Cutting								
	Golden Retreat Layout								
	1st Cross LHS		1.00	45.00	1.50	0.23	15.53		
	2nd Cross LHS		1.00	45.00	1.50	0.23	15.53		
	3rd Cross LHS		1.00	45.00	1.50	0.23	15.53		
	4th Cross LHS		1.00	45.00	1.50	0.23	15.53		
	Bad Reaches		7.00	2.50	2.50	0.23	10.06		
			8.00	2.00	1.50	0.23	5.52		
			10.00	1.50	1.50	0.23	5.18		
							458.68	1768.08	810978.51
12	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgl/sqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&I/WD SR 2016-17)								
	Sadiq layout	Cum							
	Sadiq Layout main Road		1.00	450.00	1.50	--	675.00		
	A Cross Road		1.00	80.00	4.80	--	384.00		
	B Cross Road		1.00	115.00	5.00	--	575.00		
	UGD Cutting								
	Golden Retreat Layout								
	1st Cross LHS		1.00	45.00	1.50	--	67.50		
	2nd Cross LHS		1.00	45.00	1.50	--	67.50		
	3rd Cross LHS		1.00	45.00	1.50	--	67.50		
	4th Cross LHS		1.00	45.00	1.50	--	67.50		
	Bad Reaches		7.00	2.50	2.50	--	43.75		
			8.00	2.00	1.50	--	24.00		
			10.00	1.50	1.50	--	22.50		
							1994.25	27.56	54961.53
13	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&I/WD SR 2016-17)								
	Sadiq layout	Sqm							
	Sadiq Layout main Road		1.00	450.00	9.50	--	4275.00		
	Golden Retreat Layout								
	1st Cross LHS		1.00	45.00	6.00	--	270.00		
	2nd Cross LHS		1.00	45.00	6.50	--	292.50		
	3rd Cross LHS		1.00	45.00	5.80	--	261.00		
	4th Cross LHS		1.00	45.00	6.00	--	270.00		

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Bell Mouth		5.00	5.00	6.00	--	150.00		
							5518.50		
	Deduct prime coat						-314.75		
							5203.75	3.18	16547.93
14	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWD SR of 2016-17)								
	Sadiq layout	Sqm							
	For Laying BC								
	Sadiq Layout main Road		1	450.00	9.50	--	4275.00		
	A Cross Road		1	80.00	4.80	--	384.00		
	B Cross Road		1	115.00	5.00	--	575.00		
	Golden Retreat Layout								
	1st Cross LHS		1.00	45.00	6.00	--	270.00		
	2nd Cross LHS		1.00	45.00	6.50	--	292.50		
	3rd Cross LHS		1.00	45.00	5.80	--	261.00		
	4th Cross LHS		1.00	45.00	6.00	--	270.00		
	Bell Mouth		5.00	5.00	6.00	--	150.00		
							6477.50	12.72	82393.80
15	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWD S.R 2016-17)								
	Sadiq layout	Cum							
	For Laying BC								
	Sadiq Layout main Road		1	450.00	9.50	0.04	171.00		
	A Cross Road		1	80.00	4.80	0.04	15.36		
	B Cross Road		1	115.00	5.00	0.04	23.00		
	Golden Retreat Layout								
	1st Cross LHS		1	45.00	6.00	0.04	10.80		
	2nd Cross LHS		1	45.00	6.50	0.04	11.70		
	3rd Cross LHS		1	45.00	5.80	0.04	10.44		
	4th Cross LHS		1	45.00	6.00	0.04	10.80		
	Bell Mouth		5	5.00	6.00	0.04	6.00		
							259.10	8118.54	2103513.71

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
16	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&I WTD SR 2016-17)								
	Edge line	Sqm	2	825.00	0.10	--	165.00		
	Center Line		0.5	450.00	0.10	--	22.50		
							187.50	542.72	101760.00
							Total Construction Cost		4897737.536
17							Cost towards Preparation of DPR LS		48978.00
18							Cost towards PMC / Third Party inspection LS		48978.00
							Sub Total		4995693.54
19							Miscellaneous and rounding off		4306.46
							Total		5000000.00

Certificate.

- 1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
- 2 The provisions made in the estimate are necessary and essential.
- 3 The workspot was inspected and work is found to be necessary.
- 4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Byahat Division

Yalahanka Zone. B.D.M.P.

Bangalore Circle